Claims

What is claimed is:

1.   A method for recognizing an object of interest in
a processing system, the method comprising:

creating at least one image model based at least
in part on at least one sample image;

receiving an input image of said object;

extracting at least one signature feature from
said input image;

determining a set of candidate models based at
least in part on filtering out any image model that does
not contain said at least one extracted feature;

forming a sample image template based at least in
part on a candidate model;

recognizing the object of interest based at least
in part on comparing said input image to said sample image
template.

2.   The method of claim 1 wherein the object of
interest comprises a person.

3.   The method of claim 1 wherein said image model is
a two dimensional model or three dimensional model.

4.   The method of claim 1 wherein said candidate
model is a two dimensional model or three dimensional
model.

5.   The method of claim 1 wherein said signature
feature is selected from the group consisting of skin

features, hair features, age, gender, or a combination thereof.

6. The method of claim 1 wherein said sample image template is a two-dimensional template.

7. The method of claim 1 wherein said method further comprises performing feature extraction upon receipt of the input image.

8. The method of claim 1 wherein said formation of a sample image template further comprises calculating at least one parameter of said object.

9. The method of claim 8 wherein said parameter is selected from the group consisting of direction, expression, articulation, lighting, or a combination thereof.

10. The method of claim 8 wherein said parameter is calculated based upon a cue obtained from an outside source.

11. The method of claim 10 wherein said outside source is selected from the group consisting of an audio source, a video source, a text source, or combinations thereof.

12. An apparatus for recognizing an object of interest in a processing system, the apparatus comprising:
    an image capture device; and

a processor coupled to the image capture device and operative (i) to receive an input image of said object; (ii) to extract at least one signature feature from said input image; (iii) to determine a set of candidate models at least in part by filtering out image models that do not contain said at least one extracted feature; (iv) to form a sample image template based at least in part on a candidate model; and (v) to detect the object of interest based at least in part on comparing said input image to said sample image template.

13. An apparatus for recognizing an object of interest in a processing system, the apparatus comprising:

a processor coupled to a memory and operative (i) to receive an input image of said object; (ii) to extract at least one signature feature from said input image; (iii) to determine a set of candidate models at least in part by filtering out image models that do not contain said at least one extracted feature; (iv) to form a sample image template based at least in part on a candidate model; and (v) to detect the object of interest based at least in part on comparing said input image to said sample image template.

14. An article of manufacture comprising a storage medium for storing one or more programs for recognizing an object of interest in a processing system, wherein the one or more programs when executed by a processor implement the steps of:

receiving an input image of said object;

extracting at least one feature from said input image;

determining a set of candidate models based at least in part by filtering out image models that do not contain said at least one extracted feature;

forming a sample image template based at least in

5 part on a candidate model;

recognizing the object of interest based at least in part on comparing said input image to said sample image template.